

### Amendments to the Claims

Please amend the claims as indicated:

1. (Currently Amended) An autonomic management apparatus for autonomic management of system resources on a grid computing system, the apparatus comprising:
  - a storage device storing executable code;
  - a processor executing the executable code, the executable code comprising:
    - a monitor module configured to monitor the grid computing system for a predictive trigger event comprising an anticipated change in data flow based on collected historical information;
    - a policy module configured to access one of a plurality of system policies, each of the plurality of system policies corresponding to an operational control parameter of a system resources comprising client processor capacity, client storage capacity, and client memory capacity allocated to of the grid computing system, wherein a plurality of clients both provide the system resources and employ the system resources and the plurality of system policies comprises a system prediction policy; and
    - a regulation module configured to autonomically adjust regulate at the system resource allocated to the grid computing system from a client in response to the anticipated change in the data flow and modify a client fee for participation in the grid computing system in response to the adjustment.
  - 2. (Canceled)
  - 3. (Original) The apparatus of claim 1, wherein the operational control parameter comprises a command to regulate the system resource.
  - 4. (Canceled)
  - 5. (Original) The apparatus of claim 1, wherein the regulation module comprises a reservation module configured to reserve the system resource for a grid system operation.

6. (Currently Amended) The apparatus of claim 1, wherein the regulation module comprises a termination module configured to terminate a reservation of the a system resource for a grid system operation.

7. (Previously Presented) The apparatus of claim 1, wherein the regulation module comprises an arbitration module configured to arbitrate conflicting grid system operations according to an arbitration policy.

8. (Currently Amended) The apparatus of claim 1, wherein the regulation module comprises a profile module configured to store a system resource profile, the system resource profile identifying the a system resource of the a client, and the system resource allocated by the client to the grid computing system.

9. (Previously Presented) The apparatus of claim 1, wherein the plurality of system policies further comprises at least one of a system regulation policy and a system termination policy.

10-19. (canceled)

20. (Currently Amended) A method for autonomic management of system resources on a grid computing system, the method comprising:

monitoring, by use of a processor, the grid computing system for a predictive trigger event comprising an anticipated change in data flow based on collected historical information;

accessing one of a plurality of system policies, each of the plurality of system policies corresponding to an operational control parameter of a system resources comprising client processor capacity, client storage capacity, and client memory capacity allocated to of the grid computing system, wherein a plurality of clients both provide the system resources and employ the system resources and the plurality of system policies comprises a system prediction policy; and

autonomically adjusting~~regulating~~ at the system resource allocated to the grid computing system from a client in response to the anticipated change in the data flow and modifying a client fee for participation in the grid computing system in response to the adjustment.

21. (Original) The method of claim 20, further comprising reserving the system resource for a grid system operation.

22. (Currently Amended) The method of claim 20, further comprising terminating a reservation of the system resource for a grid system operation.

23. (Currently Amended) A method for autonomic management of grid system resources on a grid computing system, the method comprising:

monitoring, by use of processor, the grid computing system for a predictive trigger event comprising an anticipated change in data flow based on collected historical information;

accessing one of a plurality of system policies, wherein the plurality of system policies comprises a system prediction policy, each of the plurality of system policies corresponding to an operational control parameter of a system resources comprising client processor capacity, client storage capacity, and client memory capacity allocated to of the grid computing system, wherein a plurality of clients both provide the system resources and employ the system resources and the plurality of system policies comprises a system prediction policy~~the operational control parameter comprising a command to~~ regulate the system resource;

autonomically adjusting~~regulating~~ at the system resource allocated to the grid computing system from a client in response to the anticipated change in the data flow and modifying a client fee for participation in the grid computing system in response to the adjustment;

storing a system resource profile, the system resource profile identifying the system resource of the client, ~~and the system resource allocated by the client to the grid computing system.~~

24. (Currently Amended) A computer readable storage medium storing executable code executed by a processor to carry out a method for autonomic management of system resources on a grid computing system, the method comprising:

monitoring the grid computing system for a predictive trigger event comprising an anticipated change in data flow based on collected historical information;

accessing one of a plurality of system policies, each of the plurality of system policies corresponding to an operational control parameter of a system resources comprising client processor capacity, client storage capacity, and client memory capacity allocated to the grid computing system, wherein a plurality of clients both provide the system resources and employ the system resources and the plurality of system policies comprises a system prediction policy; and

autonomically adjusting~~regulating~~ at the system resource allocated to the grid computing system from a client in response to the anticipated change in the data flow and modifying a client fee for participation in the grid computing system in response to the adjustment.

25. (Canceled)

26. (Original) The computer readable storage medium of claim 24, wherein the method further comprises reserving the system resource for a grid system operation.

27. (Currently Amended) The computer readable storage medium of claim 24, wherein the method further comprises terminating a reservation of the a system resource for a grid system operation.

28. (Original) The computer readable storage medium of claim 24, wherein the method further comprises arbitrating conflicting grid system operations according to an arbitration policy.

29. (Currently Amended) The computer readable storage medium of claim 24, wherein the method further comprises storing a system resource profile, the system resource profile identifying the a system resource of the a client, and the system resource allocated by the client to the grid computing system.

30. (Currently Amended) An apparatus for autonomic management of grid system resources on a grid computing system, the apparatus comprising:

a storage device storing executable code;

a processor executing the executable code, the executable code comprising:

means for monitoring the grid computing system for a predictive trigger event comprising an anticipated change in data flow based on collected historical information;

means for accessing one of a plurality of system policies, each of the plurality of system policies corresponding to an operational control parameter of a system resources comprising client processor capacity, client storage capacity, and client memory capacity allocated to of the grid computing system, wherein a plurality of clients both provide the system resources and employ the system resources and the plurality of system policies comprises a system prediction policy; and

means for autonomically adjusting regulating at the system resource allocated to the grid computing system from a client in response to the anticipated change in the data flow and modifying a client fee for participation in the grid computing system in response to the adjustment.

31. (Canceled)

32. (Canceled)

33. (Canceled)

34. (Canceled)

35. (Previously Presented) The method of claim 20, further comprising blocking a potential change in at least one of the system policies according to a threshold corresponding with a subscription criteria.

36. (New) The apparatus of claim 1, wherein the client initiates a grid application in response to the anticipated change in data flow, the client fee is proportional to a level of the system resources contributed by the client and a level of grid system demand, and the client fee is based a client use of the grid system selected from the group consisting of instantaneous use, average use, maximum use, minimum use, planned use, reserved use, and peak use.

37. (New) The method of claim 20, wherein the client initiates a grid application in response to the anticipated change in data flow, the client fee is proportional to a level of the system resources contributed by the client and a level of grid system demand, and the client fee is based a client use of the grid system selected from the group consisting of instantaneous use, average use, maximum use, minimum use, planned use, reserved use, and peak use.

38. (New) The method of claim 23, wherein the client initiates a grid application in response to the anticipated change in data flow, the client fee is proportional to a level of the system resources contributed by the client and a level of grid system demand, and the client fee is based a client use of the grid system selected from the group consisting of instantaneous use, average use, maximum use, minimum use, planned use, reserved use, and peak use.

39. (New) The computer readable storage medium of claim 24, wherein the client initiates a grid application in response to the anticipated change in data flow, the client fee is proportional to a level of the system resources contributed by the client and a level of grid system demand, and the client fee is based a client use of the grid system selected

from the group consisting of instantaneous use, average use, maximum use, minimum use, planned use, reserved use, and peak use.

40. (New) The apparatus of claim 30, wherein the client initiates a grid application in response to the anticipated change in data flow, the client fee is proportional to a level of the system resources contributed by the client and a level of grid system demand, and the client fee is based a client use of the grid system selected from the group consisting of instantaneous use, average use, maximum use, minimum use, planned use, reserved use, and peak use.